

(19) World Intellectual Property
Organization
International Bureau



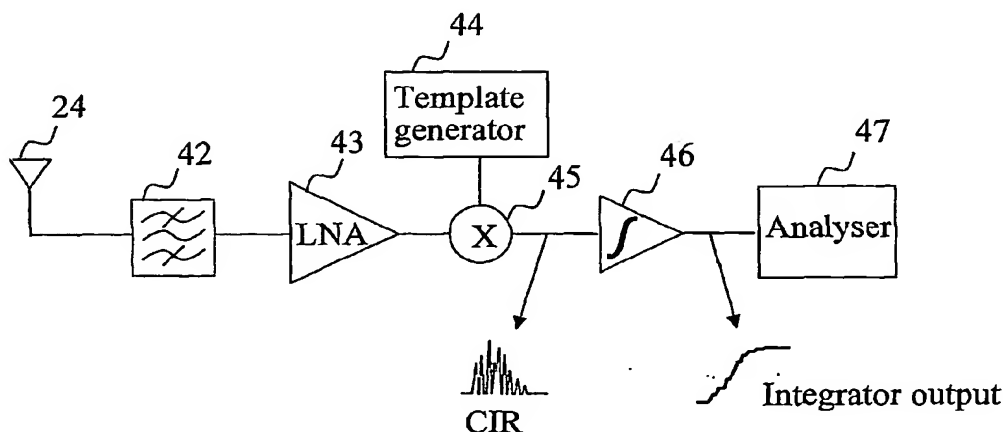
(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/048478 A1

- (51) International Patent Classification⁷: **H04B 1/69**, H04L 27/00, H04B 1/38
- (21) International Application Number: PCT/FI2004/000674
- (22) International Filing Date: 12 November 2004 (12.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 20031665 17 November 2003 (17.11.2003) FI
- (71) Applicant (for all designated States except US): **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FI-02150 Espoo (FI).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **REUNAMÄKI, Jukka** [FI/FI]; Elementinpolku 15 C 32, FI-33720 Tampere (FI). **PALIN, Arto** [FI/FI]; Rantatie 39, FI-37830 Viiala (FI).
- (74) Agent: **FORSSÉN & SALOMAA OY**; Eerikinkatu 2, FI-00100 Helsinki (FI).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PULSE-BASED COMMUNICATION



(57) Abstract: The invention relates to a method for broadband communication. The method comprises transmitting a sequence of pulses or impulses at a pulse repetition frequency from a first communication device to another device via a wireless link. The method further comprises adjusting the pulse repetition frequency based on channel delay spread measurements performed by said another device.